1: Burrows--40 (1947-48) Woleaians
531 Ifalik

" ...weaving is entirely in simple check, and the only color patterns woven in are longitudinal stripes. Transverse borders are often embroidered with a needle near each end. The patterns on these include checks, triangles, diamonds, zigzag, lines, herringbone stripes, and a variety of other rectilinear figures."

2: Damm et al. --97 (1909) 1938 Woleaians
116, 345, 531 Ifaluk

The men's houses are the only ones, which have colored ornaments (kawoluắl), arranged in a rather artistic decoration. Formerly the central supports and the roof supports (wắu) were very ornate. In the men's house Sarfert found an old beam under the roof; two sides of it were decorated with the rašŭ́m pattern [AN: see drawing 176 of source]...while the third had a double rhomboid design, wŏ́wo, which was supposed to represent a fish of the same name (drawing 177 of source).

On the pillar of a small dwelling Sarfert saw the vertical karebắli wulugắlâi pattern, which was supposed to reproduce the tail of the wulugắlâi fish [AN: see drawing 178 of source].

There were practically no wood carvings; however, Krämer found a wooden fish in the chief's house; then the waliwŏ́l for Ällülĕ́ï should also be mentioned among the artistic products.

4: Krämer--38 (1909) 1937 Woleaians
116, 304, 531 Lamotrek

Tattooing and painted ornamentation on the island are not, or rather, no longer subject to the strict rules of the West Carolinians; I say no longer, because Lütke shows that 100 years ago it still at least partly existed on Lukunor. The truth of this thought seems also to be expressed by Kittlitz. But by now definitely inscribed patterns are no longer in effect and ornamentation is confined to groups of it on the legs--examples of it are given in the illustrations--; the patterns of women are more elaborate. Men, on the other hand, wear little or no ornamentation of their legs, but instead have designs on their arms; see Figure 9 [VMM: see source] of two insides of arms, which show numerous rows of patterns one above another and among them apparently spear heads rastim (Figure 9b [VMM: see source]): The outer sides of the thighs [VMM: see source Figure 10a-d] usually have only two vertical pattern rows of shark teeth or fish; the favorite species are the pup and the küe. These patterns are included in the ornamentation of the women, Fig. IIa, b [VMM: see source] (the woman Netailemoar) and Fig. 12, and rank next to the many other patterns which are presented in Figure 79 [VMM: see source], The illustrations mentioned show the arrangement that on the woman Loalimul (Figure 13 [VMM: see source]) is particularly elaborate. In this instance we see ornamentation on the side and extending forward from the seat so that it occupies the space over the hip bone; from here a wide decorative stripe runs down the outside of the thigh to the knee, where a few rings--open to the side--encircle the entire leg. Around the back of the leg there appear a few unconnected patterns.

4: Krämer--38
116, 304, 531

(1909) 1937

Woleaians
Lamotrek

It is noteworthy that on Lamotrek the Mons veneris is ornamented with the black triangle puáre, which also occurs on Ponape, but was not observed on Truk. Hambruch noticed it on Elato where it was used as house ornament Mák e boár [VMM: it is illustrated on page 30--see source.]

4: Krämer--38-41 (1909) 1937 Woleaians
116, 301, 531 Lamotrek

In the discussion of ornaments (Fig. 79 [VMM: see source]) we might add that the species of fish mentioned with the same name occur on Truk, but that in the latter instance the fish are dolphins, but not in double form. Another feature identical with Truk is the shark tooth that is so common. But the other patterns are usually different and the same is true of the names. [41]

With the exception of those mentioned above, no interpretation is possible for the many types of ornaments given in Figure 79 [VMM: see source]. An ornamented house gable (as is known, for instance, on Palau) is called tabau and the fact of the existence of the term proves its occurrence.

4: Krämer--41
116, 531, 386

(1909) 1937

Woleaians
Lamotrek

No details are available on the subject of painted ornamentation. Turmeric is acquired by trade transactions and is thus available like on the other islands, but it is rarely used. The red paint of the canoes has its origin in red earth, lap, from Yap or Truk; that of Yap is considered better in quality. From it the expression tabbi en lap, paint bowl, is derived and the word for paint brush is golelië.

Vessels tëbbi (Hellwig: tapi), Plate rölig.
(cf. Plate 7.) [VMM: see source]

These vessels are made of wooden blocks or boards; see Plate 8b [VMM: see source]. bóati--lugs are found on them as the illustrations show (the same as on Truk, Palau etc.). Bowls may vary in shape: the foot may be roundish and raised; the total height is 13 centimeters, and the width of the bowl amounts to 32 centimeters. The brim of the bowl is often almost hexagonal, as the specimen in Figure 26 a [VMM: see source]; the base sometimes is two-legged (b). The round bowl in Figure 27 (Kramer 452=3207) has two high feet which stand on a base and which facilitate eating; the entire height of the bowl is 25 centimeters, and the length of the roundish bowl amounts to 24 1/2 centimeters (Hellwig 209k: foot--perël).

The bowl in Figure 28 shows a somewhat lower foot, for the latter is only 6 1/2 centimeters in height; it is actually a low stool with four legs on which rests a longish bowl which has a length of 21 centimeters and a width of 13 centimeters. Hellwig 2336 is similar in shape.

Figure 29 [VMM: see source] shows a tray for eating fish which does not have a high base; nevertheless, we may notice a slight elevation at the right of the illustration. The plate is oval and pointed at the ends, 42 centimeters long and 22 centimeters wide and has a low molding along the edge, which in effect seems to be [64] a little fence; there is a hole in it at one side for the suspension cord.

Hellwig 2226-6006 is called tapi lemălu wulól; it is longish in form but is not painted red and does not have any inlay of mother-of-pearl.

There are three bowls in the Linden museum in Stuttgart which are said to come from Lamotrek: one is flat and oval, one is round and flat and shallow, and one is deep and oval in shape and has two bird heads instead of lugs; in the latter case the foot is low and represents a closed square.

Bowls with lids. The box in which the fish hooks are kept, the sóp is such a chestlike vessel; see Figure 30. The length of the specimen pictured is 12.4 centimeters and the width may vary from 3.8 centimeters, while the height is 4 centimeters; Hellwig has a bowl with a lid which he calls sáp; for the box itself he uses the word bassobasso, the lid is gárebal, the knob bóatil, the brim nadjel, and to open is sugi.

A peculiar bowl is a specimen with a lid and a decoration of Greek figures; one of the figures is represented seated on the long side whereas a person is shown standing on the short side. It is said to have been made by the Spaniard Gulio, who happened to be on Lamotrek at the time of the typhoon of 1907; the box is 77 centimeters long, 27.6 centimeters high and 27.5 centimeters wide. Figure 31 [VMM: see source].

The bird bowls resemble those from Truk. Kramer 493-3247" has a horse-shoe shaped base formed by the two feet of the bird as in Figure 32 [VMM: see source]. The length of the bowl is 37 centimeters, and its height is 20 1/2 centimeters. The model

must have been a frigate bird; Hellwig calls the bowl tapi a gataf and says that it is meant to hold the color substance that comes from Yap. Krämer 453-3208 is called tapi e lāp; it does not have a foot and for that reason is suspended; it is 48 centimeters long and has a piece of wood which is used for painting since the bowls are used for paint. One specimen is pictured in Figure 33 [VMM: see source].

A bowl very similar in form to the one last mentioned is in Berlin, and one with a bird hiding its head and a pointed head and forked tail comes from Elato; it is 50 centimeters long.

Among the vessels we must also count coconut shells; one of them, known as dagág a lül, is set on a round base as in Figure 34 [VMM: see source], and has [65] a handle. It is said to have been invented by the boy Malüvit, when he was between 7 and 8 years old; this boy is credited also with having started this type of vessel in trade. Naturally we are in this instance dealing with foreign influences or else we must interpret it as an old Indonesian motif since bowls on stands and some with handles occur in West Indonesia. It is used as a drinking cup for water or garri (palm juice) (13.5 centimeters wide).

Containers of coconut are called ware; their shape may be that of a nut as in Figure 35 [VMM: see source] where the length is 15 centimeters and the width 8 centimeters; in other instances they have lids (pelipelal) and bottoms; Hellwig 2246-6023 Figure 36, has a height of 7 centimeters. Purpose: for keeping fish hooks, medicine etc.; they are also used as containers for fire wood, gulegul. In addition there are containers of

bamboo which are decorated in the same manner as in Indonesia. [66] Hellwig 2228-6008 Figure 37, has on it arepél e bulugale "tails of the b." and shark's teeth, and the patterns are arranged in six rows. Hellwig 2330-6099 Figure 39 shows various ornamental patterns, e.g., 9, 11, 22, 33, 43 and the pup-like little men of 23; they are either half or double. Hellwig 2118 has a scratched decoration of tirigi points.

In Berlin there is a bamboo stick with many designs scratched into it including birds, crosses, suns, teeth; it is similar to the specimens that have come from Oleai,

4: Krämer--75-76
116, 386, 285, 531

(1909) 1937

Woleaians
Lamotrek

c. Dyeing [VMM: of fibers to be used in mats]

Both gilifer hibiscus fibers and uidj banana yarn are dyed black when special designs are to be brought out in the textile. The yarn is first dyed in a greenish juice which is brewed from crushed terminalia leaves and water. Then black pumice stone with water is scraped on iron and young coconut husks are thrown into the liquid; a special greasy type of soil that drifts ashore is added; the fibers are put in this liquid with its coloring substance for twenty-four hours. Then they are rinsed and dried. In more recent times occasionally red threads have appeared in mats; they have been dyed with artificial dyes --red, green, blue, and violet--that must have been acquired through trade and are not readily available on the island. [76]

An example is Krämer 518, a mat with three red stripes, which resemble Krämer 519 (najelle malu galapal with small stitches gukudj); Krämer 460 dõr peig. . . has three green stripes and the same applies to Krämer 520; Krämer 521, paliälüf, has a red stripe along the edge and three stripe patterns--1 red between two green ones (similar to the mat on Plate 7e [VMM: see source]); Hellwig 2272 along the edge has two green and, in the middle, three stripes--green, black, green--; Krämer 515 is similar; it has spotted stripes and red transverse ornaments which are known as galut ma dab.

First Type of Mat
(cf. Plate 6, 7, 10 [VMM: see source]).

Mats of hibiscus with a pattern of seven stripes are worn by women, whereas mats with seven stripes worn by men are made of banana fibers.

The éllepat a le gílifer is such a hibiscus mat for women; it has seven black stripes and six light stripes of yellowish natural color between them; the effect in the case of the latter is produced by some groups of white, shiny, banana fibers. Some white banana fibers. Some white banana threads are even introduced into the black stripes; they are used either one or two at one time and are so fine and thin that they do not weaken the impression of blackness. The effect of most of the double threads in the black fields is purely ornamental. In order to produce this effect, four shed formations are necessary, whereas the entire remaining part of the mat is woven with the two sheds of the plain weave. To weave ornamental stitches by means of the four shed formation is known as gásuitieb, two shed or plain weave--aláli pelách. From now on I shall talk about these types of weaves using the native terms; the word for banana fiber is uidj, that for hibiscus fibers gilifer.

garier is the name for the seven striped men's mat which is made of uidj. It is woven with finer threads than the women's mat and, when especially fine, it is known as garier kénusch (Plate 6i [VMM: see source]).

Most common are plain weaves, aláli pelách, but also three and four shed patterns,

gásuitiĕb, with the above described ornamental effect in the black stripes occur. galut is the term for a seven-striped mat, in which the pattern appears as in gásuitiĕb on both sides. It is a four shed pattern.

The following types of striped mats are known: marŭp made of gilifer with five or six stripes; it is a coarse, plain weave which is often dyed with traded dyes. The black, green or dark blue stripes are broken by white, red or other colors and the intervening sections appear uniformly light. I did not see these mats in the unfinished state while work was done on them; they occur identically on Sëtoval and thus it is possible that they have been traded on that island. They look very modern; I learned that on the surrounding islands of Sëtoval, Pollap and others no weaving had been done, because it was taboo. [77]

I shall now go on to describe the characteristic mats with three stripes; additional ornamentation of them are the black patterns which are produced by fibers introduced in the direction of the weft, which constitute the transverse bands at the beginning and the end of the mat. In the course of weaving black gilifer fibers are sent through the warp threads between every weft by means of a little wooden rod; they are fastened and held secure by the following weft. This is plait weaving known as dab.

Second Type of Mat.

The peig mats have three stripes and are woven of fine, white uiɖj fibers with narrow black marginal stripes and a wider black stripe in the center* and very narrow red threads may be used in the center; Plate 6a-f [VMM: see source].

*Plate 6b [VMM: see source] has three wide stripes peig na tas.

4: Krämer--76-79 (1909) 1937 Woleaians-2
116, 285, 531, 177 Lamotrek

We must add in the case of the majority of the peig the dab pattern, latitudinal stripes at the beginning and the end of the mat, which are very delicate in these fine mats.

The black stripes in the longitudinal direction may either be weaves of uidj or gilifer; the dab patterns are always made of gilifer fibers, which in their dull blackness contrast very nicely with the glossy, light uidj.

My studies of native weaving were greatly aided by the assistance of Bessi (Plate 3d [VMM: see source]), the half-breed daughter of the English trader Lewis....In order that I might become familiar with the various dab patterns, she wove for me an exceedingly beautiful, abundantly ornamented mat (Plate 7d [VMM: see source]) with a great variety of latitudinal designs (Figure 49 [VMM: see source]). It has the name najile malugelep al--dab o fasch and belongs to the group of the three-striped peig alali pelach (with plain weave). The wide stripe in the center is broken by two white, and one red, lines. In the plaiting work, dab, red and green threads have been used in addition to black ones and this variety is a concession to modern times. The patterns however are of the true old type and have names and significance. Some of them are said to have originated on other islands. [VMM: see source Figure 47, for illustrations of the following designs.] When one begins at the upper end, one comes first to

1. A. uasstich — pattern for the beginning of the mat
2. B. langodab — a very narrow border which serves to outline a pattern

		and which appears immediately above C.
3.	C. sepasse iliuil	canoe sails of several boats that sail together.
4.	B. langodab	see B, directly underneath C.
5:	D. uadj	neck tattooing of a man
6.	B. langodab	see B. [78]
7.	E. fäsilümat	eye (from Faraulap)
8.	B. langodab	see 6. B.
9.	D. uadj	see 5. D.
10.	F. uägüpä	unexplained
11.	G. garrach	plant design from Ifaluk
12.	H. ngingi	neck tattooing of a man
13.	J. bub (pup)	a fish (see Truk, page 150 X) [79]
14.	K. päülümel	a flying bird
15.	J. bub	fish, see 13.
16,	C, kusae	pattern from Kusae
17.	M. fäülümat	eye, from Ifaluk (see 7)
18.	C, kusae	see 16
19.	N. gogotjub	see 12
20.	O. pöulul	"round thing"
21.	P. ngilipaggo	shark's tooth (Truk, page 188 b).

22. Q. ligongare Ifaluk pattern
23. R. B =Bessi, the plaiter
24. S. fatarigavŭong small animals of the sea lined up

The majority of these plaiting patterns definitely have a left side, but there are some among them which look alike on both sides. If the latter are used for a fine peig mat, and if the decorative stitches appear alike in the black longitudinal stripes on both sides, then we are dealing with a rare and valuable mat, which is called peig galut.

It has been mentioned above that peig also exist without dab patterns; they are shown on Plate 6d and f [VMM: see source]. Finally we want to refer to the lugüllü uidj, mats of coarsely split banana fibers, which may be compared to the peig, except that they are much coarser. As in the case of the peig, there exist various sub-types: 1. completely white without any ornamentation, 2. with black stripes along both sides and with or without dab (Plate 6h [VMM: see source]) 3. with a central stripe in addition to the stripes along the edges, which makes the mat three striped, 4. three-striped and ornamented with dab, having at both ends coarse, simple patterns of black gilifer fibers (Plate 6c [VMM: see source]). All these mats have plain weaves. In addition to the local weaving products, one sees mats imported from Truk; especially men are fond of the plain, white banana fiber mat, which is called aliel; a yellowish type is known as garite. ngăremus and pagutiu are two types of mats for women that come from Truk.

4: Krämer--76-79
116, 285, 531, 177

(1909) 1937

Woleaians-5
Lamotrek

Words:

fisudab	lattice weave (of dab pattern)
djuidab	needle used for the lattice weave
famalidab	pattern of the dab

4: Krämer--84-86
116, 342, 504, 531

(1909) 1937

Woleaians
Elato

On Elato there may be a semi-conical roof so that the gable slopes; here the lower part of the house, the wall, is made of coconut mats (Figure 12a [VMM: see source]). Sometimes coconut fronds are hung directly from the ridge, and their stalks are pointed up.

Such semi-conical, sloping roofs may also be observed on the canoe-houses (Figure 53 [VMM: see source]) which are open all around, e.g., they do not have any walls. In this case, the lower frame beams do not exist [86], but only the upper framework is there and consists of square roughly worked beams (Plate 9c [VMM: see source]). They are often elaborately ornamented and the same is true of some of the square purline (Color Plate 2 and Plate 4a) [VMM: see source].

4: Krämer--175 (1909) 1937 Woleaians
116, 531 Lamotrek

No special attention is given to art. But the canoe-house, dwellings, mats and looms of Lamotrek are the most beautifully ornamented of all. Also tattoo patterns and bamboo boxes show a variety of designs; the most important are represented below.

The chart of the following designs is taken mainly from tattooing, but some of them are patterns of chip carving....[VMM: For designs see source.]

4: Krämer--243 (1909) 1937 Woleaians
116, 531 Woleai

A large number of patterns occur on the bamboo vessels and containers that have just been described. Among them are the ray tattoo designs which in large numbers are shown in Figure 79 of Lamotrek [VMM: see source]; but the ornaments pictured in 107b-109b [VMM: see source] are not very different. As on Lamotrek the houses on Oleai have decorated gables.

11: Born--179-180 (1903) 1904 Woleaians
301, 531, 437 Woleai

This ornament [ML: jil, a belt worn by women] is an admirable example of Micronesian art, and shows a great deal of taste and aesthetic feeling. It is made on the islands of Ululssi, Feis, Aurepik, Ugulu, and Sorol, where the people of Oleai buy it in exchange for mats, canoes, and food. The best jil are made on Aurepik. They are about 60 to 70 centimeters long, and 4 or 5 centimeters wide; they consist of shell disks and coconut beads strung up on nine strands which are held together by ten tortoise shell buckles, pak-ele-jil. The basic pattern is always the same, with only a few slight variations in details: there are two black areas with a [180] white line through the center, three smaller areas with a black line through the center, and two white areas at each end with a black cross, which again has a white area in the center.

The value of these belts varies considerably, depending on the care with which the work has been executed and on the type of materials chosen. The most highly valued belts are those which have black beads made of tortoise shell rings. These are made on Ugulu and Aurepik. Those made on Sorol and Feis have the lowest value. Here the separate strands are shorter and they are not held together as firmly as in the other belts, and the beads are not made with as much skill and care as those on Aurepik.

Few of the houses have ornaments on the gables or the equipment. The only attempt worth mentioning is a pattern on the front and back of the houses, consisting of a row of fish painted on a white background. I found no carved human and animal figures such as those made on Jap. I saw one carved canoe, [190] but the workmanship was crude and careless, and could not be compared with that of Jap. The reverse is true of the actual canoes used. The crude, unattractive canoes of the Jap natives cannot compare with those of the natives of Oleai.

28: Spiro--80 [2] (1947-48) 1949 Woleaians
116, 531 Ifalik

"Though there are no 'fine arts' in the atoll, there are, of course, industrial arts, as we have seen, and some of these display very fine decorative art. The canoes are painted with fixed color and design patterns. And it is this fixity that is most impressive. Not only is every canoe made the same, according to the same design, but every canoe is painted identically the same as every other canoe. No one diverges from the cultural pattern. This design, it is of interest to observe, is universal in the Western Carolines, as is the actual structure of the canoe."

6: Müller--196 E-5? (1909-1910) 1917 OR22 Yap OR22
Woleai OR21
Truk OR19
Ulithi OR20

/Between pp. 114 and 115./

Plate 32

Y
286
531
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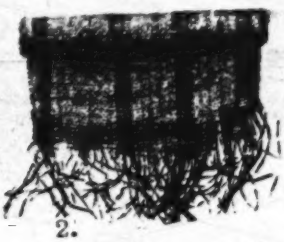
1.



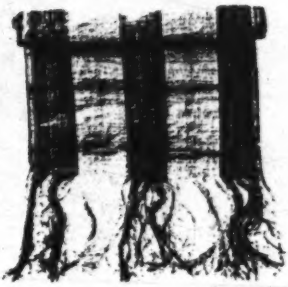
2.

3.

YUW
286
531

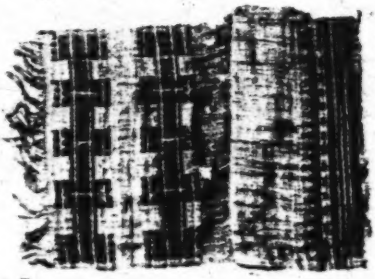
4.

5.

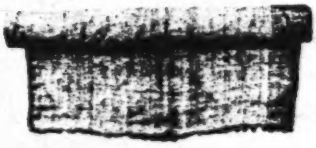


6.

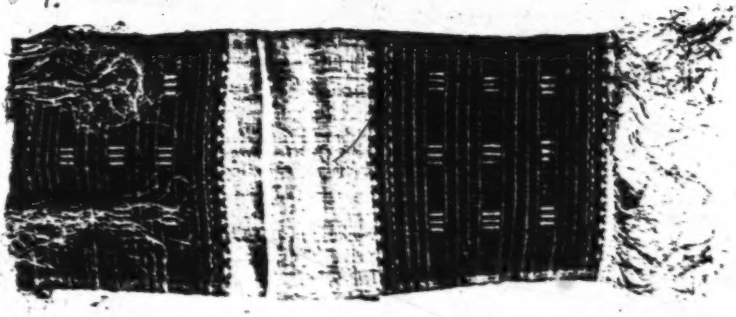
YTW
286
531



7.



8.



9.

1. Old weaving, fāgă̆ĭl. Village of Māvŭ, 102: 41 cm. Mŭ. Coll. 189.
2. Old weaving, fāgă̆ĭl. Village of Māvŭ, 116: 43 cm. id. 308.
3. Weaving vāgĭ. Village of Gătšă̆laju. 132. 5:25 cm., id. 55.

(cont.)

6: Müller--197 E-5 (1909-1910) 1917 OR22 Yap OR22
Truk OR19
Woleai OR21
Ulithi OR20
Y
W
U
286
531

/Captions for Pl. 32 cont./

4. Weaving from Mogĕmŏg. 134:37 cm., id. 194.
5. Weaving from Gătšălaj or the central Carolines, 125 cm., id. 53.
6. Mat from Fĕlŭg (Ifaluk), 150:51 cm., id. 162.
7. Old Lūĕtš weaving. Village of Lūĕtš, 44.5: 126.5 cm., id. 188.
8. Mat from Truk, 205:54.5 cm., id. 193.
9. Mat from Ănăn̆ăj (Oleai), 129:35 cm., id. 39, 1/10 actual size.

T
W
286
531

/115 cont./

U
286
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10. ĭlŏŏ: bamboo tube around which the whole warp runs, corresponding to the Yap vŏtšăvŏts.

11. tăpăn: the bamboo tube separating the two primary warp-layers, corresponding to the tārăn.

12. vālŏn̆ŏn̆ and n̆ŏn̆: the lifter of the lower primary warp-layer, with its spiral thread. On the Mŏgĕmŏg loom this arrangement is doubled; the second raises individual threads of the other primary warp-layer, so that here another, but not equivalent shed is formed.

13. ɟīv or ɟiɣ: little bamboo stick that divides this warp-layer in half.

14. ɟiv or ɟiɣ: four little sticks at the beginning of the weaving, corresponding to the two "mĭt."

U
286

The arrangement of the warp is also different and more complicated, although the woman doing the weaving contents herself with four sticks (Pl. 30, No. 2). The separation of the warp-layers is done by the stick to the right of the woman, around the outer half of which the spiral thread is drawn. Despite the fact that the Yap people can observe this method every day, they have not imported it.

Y
[177]
286
436
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Mat-money Weaving. A little remains to be added about the technique of weaving the mat-money, which is done only

'[see page 188.--Analyst]